

***Leptopoma melanostoma janetabbasae*, a new subspecies (Gastropoda: Cyclophoridae) from Indonesia, and Correction of Errata in “New Shells of South Asia”**

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ABSTRACT A new subspecies of genus *Leptopoma* Pfeiffer, 1847 is described from Selawati Island, West New Guinea, Indonesia and compared to six other species and forms of this genus: *Leptopoma melanostoma* (Petit, 1841), *Leptopoma niasense* Fulton, 1907, *Leptopoma perlucidum* f. *subalatum* Quadras & Möllendorff, 1893, *Leptopoma helicoides* (Grateloup 1840), *Leptopoma vitreum* (Lesson, 1830) and *Leptopoma stainforthi* (Sowerby, 1842). It is characterized by a translucent shell, dark brown umbilicus, black outer lip and columella, narrow but raised peripheral rib, and wide dark brown umbilicus.

KEY WORDS Gastropoda, Cyclophoroidea, Cyclophoridae, *Leptopoma*, Selawati Island, West New Guinea, Indonesia, new taxon

INTRODUCTION

The genus *Leptopoma* Pfeiffer, 1847 belongs to the family Cyclophoridae and has many species collected in Indonesia. In July of 2018, a hitherto cyclophorid was found. It was not listed in the works by Parkinson, Hemmen & Groh (1987), Abbott (1989), Maassen (1997), Dharma (2005), Stanisic, Shea, Potter & Griffiths (2010), Tarruella & Domènech (2013) and Thach (2016, 2017, 2018). It is here described as new to science.

Abbreviations.

BOR/MOL	Borneensis Malacology Collection, University of Malaysia Sabah
LKCNHM	Lee Kong Chian Natural History Museum, National University of Singapore
RMNH	Naturalis Center of Biodiversity, Leiden, The Netherlands
NNT	Collection Dr. Thach
JAC	Collection John Abbas
AH	Aperture height

AW	Aperture width
SH	Shell height
SW	Shell width

SYSTEMATICS

Class Gastropoda Cuvier, 1797
 Superfamily Cyclophoroidea Gray, 1847
 Family Cyclophoridae Gray, 1847
 Genus *Leptopoma* Pfeiffer, 1847
 Type species: *Cyclostoma vitrea* Lesson, 1830

Leptopoma melanostoma janetabbasae
 Thach, 2018 (Figures 1-5)

Description. Shell conic-heliciform, translucent, medium-sized for the genus (12.4-15.2 mm in height) and slightly higher than wide with shell width 92.4% of shell height (see Table 1 with measurements on eight specimens). Spire conical and tall, sutures deep. Body whorl swollen, periphery rounded with a narrow, raised spiral rib. Sculpture consist of narrow, slightly raised, widely-spaced spiral ribs with finer and more closely-spaced spiral riblets in

interspaces. Axial sculpture with oblique and widely-spaced axial ribs, crossing spiral ribs and riblets. Aperture circular, wide, slightly deviated to ventral surface of body whorl and covering a large part of shell surface with width 66.9% of shell width and height 60.5% of shell height (see Table 1). Outer lip double, broad, calloused and slightly reflected. Umbilicus large and deep, columella straight. Operculum corneous, thin, translucent, slightly concave and multispiral with a central nucleus. Color translucent white with dark brown umbilicus, yellow brown operculum, black outer lip and columella.

Diagnosis. The new subspecies is readily recognized by translucent shell, dark brown umbilicus, black outer lip and columella and a narrow but raised peripheral rib at mid body whorl.

Type material.

HOLOTYPE 15.2 mm in height at LKCNHM with Registration No: ZRC.MOL.13431 (Figures 1 & 2).

Other Material Examined. Paratypes: all from type locality, Paratype 1: 14.1 mm in height at BOR/MOL Registration No: BOR/MOL 13978

(Figure 5); Paratype 2: 12.4 mm (Figure 3) and Paratype 3, 13.6 mm (Figure 4) NNT; Paratype 4, 14.6 mm high and Paratype 5, 14.3 mm (not illustrated) NNT; Paratype 6, 15.0 mm (not illustrated) JAC and Paratype 7, 13.4 mm (not illustrated) JAC.

Type Locality. Selawati Island, off West New Guinea of Indonesia.

Habitat. The type specimens were collected on low vegetation (bushes) or among leaf litter.

Etymology. This new subspecies is named after Janet Abbas from Indonesia for her help in collecting the type material.

Discussion. The new subspecies differs mainly from *Leptopoma melanostoma* (Petit, 1841) (Figure 5, bottom) in many of the characteristics: shape is more swollen, umbilicus is brown (not white); spiral ribs are much stronger, well visible without magnifying glass (not smooth when seen by the naked eye as described in original description at page 308 of “Travaux inédits”) and white (not reddish as described in page 309 of original description), outer lip is black with purple inner margin (not maroon black as described in original description) and

No	SH Mm	SW mm	SW/ SH	Mean SW/SH	AH mm	AH/ SH	Mean AH/SH	AW mm	AW/ SW	Mean AW/SW
1	15.2	13.7	0.90	0.92	8.5	0.56	0.61	8.8	0.64	0.67
2	14.1	12.3	0.87		8.8	0.62		8.5	0.69	
3	12.4	12.1	0.98		7.7	0.62		7.7	0.64	
4	13.6	13.0	0.96		8.2	0.60		8.3	0.64	
5	14.6	14.0	0.96		8.7	0.60		9.3	0.66	
6	14.3	13.1	0.92		9.2	0.64		8.9	0.68	
7	15.0	13.0	0.87		9.0	0.60		9.2	0.71	
8	13.4	12.4	0.93		8.0	0.60		8.5	0.69	

Table 1. Mean SW/SH, AH/SH and AW/SW of *Leptopoma melanostoma janetabbasae* n.ssp.

the new subspecies is found on a different island; *i.e.* they are not sympatric.

Leptopoma melanostoma janetabbasae n. ssp. is close to *Leptopoma niasense* Fulton, 1907 (Figure 6) but differs mainly in more swollen body whorl, black outer lip and columella. *Leptopoma perlucidum* f. *subalatum* Quadras & Möllendorff, 1893 (Figure 7) differs mainly from the new subspecies in white outer lip and columella, not brown umbilicus, aperture with external pattern visible within and not slightly deviated to ventral surface of body whorl. *Leptopoma helicoides* (Grateloup 1840) (Figure 8) is distinguished mainly from the new subspecies by a less translucent shell, more conspicuous peripheral rib, much stronger spiral sculpture, and lacking the black outer lip and columella. *Leptopoma vitreum* (Lesson 1830) (Figure 10) differs mainly from the new subspecies in longer axial ribs, lacking the black outer lip and columella, and the aperture is not slightly deviated to ventral surface of body whorl. *Leptopoma stainforthi* (Sowerby, 1842) (Figure 11) differs mainly from the new subspecies in smaller adult size, more angulate periphery, less wide umbilicus, and lacking the black outer lip and columella.

ERRATA - New Shells of South Asia (2018)

Vietnam is rather rich in land snails of the genus *Amphidromus* Albers, 1850 that live mostly in South and Central Vietnam. About 72 species and subspecies of this genus were described in Vietnam, mostly since 2015. At the beginning of 2018, two specimens of *Amphidromus inversus inversus* (Müller, 1774) were discovered in Phú Quốc Island at Southwest of Vietnam. In the book "New Shells of South Asia" published by the author in 2018, it is cited at pages 54 and 173, illustrated at plate 50 and back cover of the book. The name *Amphidromus anhi* Thach, 2018 at page 173 is

to be replaced by *Amphidromus inversus inversus* Müller, 1774 (see Figures 9 & 12 herein).

The species name *Amphidromus beschaueri* Thach, 2018, described therein and mentioned on pages 47, 137, 138, 173 of this book is to be replaced by *Amphidromus berschaueri*, due to a clerical error.

The name *Amphidromus poi* at pages 149, 150 is to be replaced by *Amphidromus koonpoi*.

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REFERENCES

- Abbott, R.T. 1989.** Compendium of Landshells. American Malacologists Inc., Florida, USA, 240 pp.
- Dharma, B. 2005.** Recent & Fossil Shells of Indonesia. ConchBooks, Hackenheim, Germany, 432 pp.
- Maassen, W.J.M. 1997.** A Preliminary Checklist of the Terrestrial Molluscs of Sulawesi, Indonesia. De Kreukel 33 (4-5).
- Parkinson, B., Hemmen, J. & K. Groh. 1987.** Tropical land shells of the world. Verlag Christa Hemmen, Wiesbaden, Germany, 279 pp.
- Stanisic, J., Shea, M., Potter, D. & O. Griffiths. 2010.** Australian Land Snails, Volume 1. Bioculture Press, Mauritius, 591 pp.

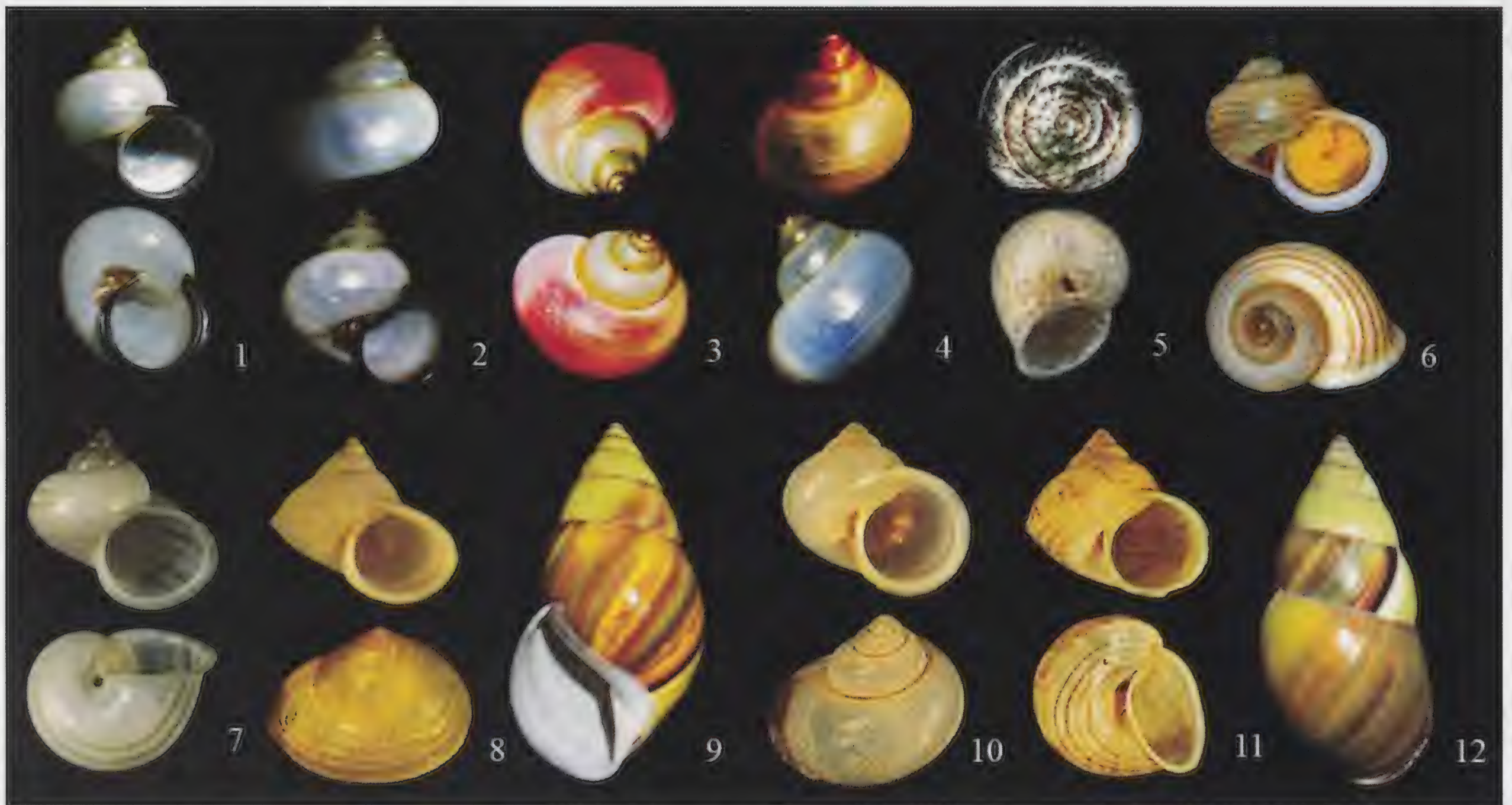
Tarruella, A. & J.L. Domènech. 2013. Listado taxonómico ilustrado de la familia Cyclophoridae J.E.Gray, 1857 (Mollusca: Gastropoda): Part 3. Los géneros *Aulopoma* Troschel, 1847 y *Leptopoma* Pfeiffer, 1847. *Spira* 5(1-2):73-79.

Thach, N.N. 2016. Vietnamese New Mollusks with 59 New Species. 48HrBooks Co., USA, 205 pp. (including 89 color plates).

Thach, N.N. 2017. New Shells of Southeast Asia with 2 New Genera and 85 New Species. 48HrBooks Co., USA, 128 pp. (including 62 color plates).

Thach, N.N. 2018. New Shells of South Asia, 3 New Genera and 132 New Species. 48HrBooks Co., USA, 173 pp. (including 87 color plates).

Website of Philippe & Guido Poppe (Conchology Inc.) <https://conchology.be/>



Figures 1-5: *Leptopoma melanostoma janetabbasae* n.ssp., Selawati Island, Indonesia - 1, 2: Holotype 15.2 mm, LKCNHM- 3: Paratype 3, 13.6 mm (uncleaned specimen attached with red soil), NNT- 4: Paratype 1, 14.1 mm, BOR/MOL (red and blue colors are due to adjustment in make spiral ribs more visible) - 5: Operculum (top) & *Leptopoma melanostoma* (Petit, 1841), photo RMNH for comparison (bottom) - 6: *Leptopoma niasense* Fulton 1907, 13-15 mm, photo of Dharma, 2005 for comparison - 7: *Leptopoma perlucidum* forma *subulatum* Quadras & Möllendorff 1893, 14.1 mm, photo G. & P. Poppe for comparison - 8: *Leptopoma helicoides* (Grateloup, 1840) 12.0 mm, photo of Abbott 1989 for comparison - 10: *Leptopoma vitreum* (Lesson, 1830) 12.0 mm, photo of Abbott, 1989 for comparison - 11: *Leptopoma stainforthi* (Sowerby, 1842) 8.0 mm, photo of Abbott, 1989 for comparison - 9, 12: *Amphidromus inversus inversus* (Müller, 1774) 52.8 mm, Vietnam.